

AMENDMENT TO THE CLAIMS:

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A method for producing introducing hydroxyl groups into an ethylene- α -olefin copolymer to produce a hydroxyl-modified ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer, the method consisting of comprising:
kneading 100 parts by weight of an ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer having a Mooney viscosity of 10 to 250 at 100°C and 0.1 to 20 parts by weight of a peroxide having a hydroperoxy group to prepare a kneaded mixture essentially containing the peroxide and the ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer, wherein the peroxide has a 10-hour half-life temperature and a 1-minute half-life temperature; and
heating the kneaded mixture essentially containing the peroxide and the ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer at a temperature equal to or exceeding the 10-hour half-life temperature of the peroxide having a hydroperoxy group and not higher than the 1-minute half-life temperature of the peroxide having a hydroperoxy group to introduce hydroxyl groups into the ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer via hydrogen abstraction.
2. (currently amended) A method for producing introducing hydroxyl groups into an ethylene- α -olefin copolymer to produce a hydroxyl-modified ethylene- α -olefin copolymer ethylene-propylene-nonconjugated diene terpolymer, the method consisting of comprising:

kneading 100 parts by weight of an ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~, 0.1 to 20 parts by weight of a peroxide having a hydroperoxy group, and a radical generator having a radical generating group so that not more than 1 mole of the radical generating groups are present with respect to 1 mole of the hydroperoxy groups to prepare a kneaded mixture essentially containing the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~, the peroxide and the radical generator, wherein said peroxide has a 10-hour half-life temperature and said radical generator has a 10-hour half-life temperature not higher than the 10-hour half-life temperature of the peroxide; and thereafter

heating the kneaded mixture essentially containing the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~, the peroxide and the radical generator at a temperature equal to or exceeding the 10-hour half-life temperature of the radical generator and not higher than 220°C to introduce hydroxyl groups into the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~ via hydrogen abstraction.

3. (previously presented) The method according to claim 2, wherein the peroxide is t-butyl hydroperoxide, t-amyl hydroperoxide, t-hexyl hydroperoxide, t-octyl hydroperoxide, cumene hydroperoxide or diisopropylbenzene hydroperoxide.
4. (cancelled)
5. (currently amended) The method according to claim 2, wherein the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~ has Mooney viscosity of 10 to 250 at 100°C.

6. (previously presented) The method according to claim 2, wherein the radical generator is a compound having a 1-minute half-life temperature not higher than 195°C.
7. (previously presented) The method according to claim 2, wherein the ethylene- α -olefin copolymer is a copolymer of ethylene and an α -olefin or a terpolymer of ethylene, an α -olefin and a diene.
- 8.-9. (cancelled).
10. (previously presented) The method according to claim 1, wherein the peroxide is t-butyl hydroperoxide, t-amyl hydroperoxide, t-hexyl hydroperoxide, t-octyl hydroperoxide, cumene hydroperoxide or diisopropylbenzene hydroperoxide.
- 11.-15. (cancelled)
16. (currently amended) The method according to claim 1, wherein said heating includes replacing a hydrogen atom of the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~ by a hydroxyl group of the peroxide having a hydroperoxy group.
17. (currently amended) The method according to claim 2, wherein said heating includes replacing a hydrogen atom of the ~~ethylene- α -olefin copolymer~~ ~~ethylene-propylene-nonconjugated diene terpolymer~~ by a hydroxyl group of the peroxide having a hydroperoxy group.